

PO No	Supplier	Line Item No	Rel Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Receive Status	Price/Unit	Aging Days	Past Due	Total	Supplier Name
PO040406	TWM001-VLU	1	Net 30	M304TR0.500W.049	304 Round Tube .500 X .049W : MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING AS PER ASTM A213 OR ASME SA213 OR ASTM A269 receive it				100	7/17/2018	100	S092699	Stock	7/12/2018	\$ 2.80 / ft	5	\$279.98	TW Metals	
		2		M304TR0.750W.049	304 Round Tube .750 X .049W : MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING AS PER ASTM A213 OR ASME SA213 OR ASTM A269 receive it				140			S092700	Stock	7/12/2018	\$ 2.58 / ft	5	\$361.06	TW Metals	
		3		M4130NTD 750W.049	4130 Round Tube .750 X .049W : MATERIAL: AISI 4130N STEEL TUBING AS PER MIL-T-6736 OR AMS-6371/6360/6361/6362/6373/6374 receive ft				40		40	S092701	Stock	7/12/2018	\$ 6.00 / ft	5	\$240.00	TW Metals	
		4		M6061T610.3125W.058	Aluminum Tube 3125 X .058W : MATERIAL: 6061-T6 T6/T62/T6510/T6511 SEAMLESS TUBING AS PER WW-T-700/8 OR QQ-A-200/8 OR QQ-A-225/8 OR AMS 4080 OR AMS 4082 OR AMS 4083 OR ASTM B210 OR ASTM B241 receive ft				120			S092702	Stock	7/12/2018	\$ 3.08 / ft	5	\$369.47	TW Metals	
		5		M6061T610.375W.058	6061-T6 Round Tube .375 X .058W : MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING AS PER WW-T-700/8 OR QQ-A-200/8 OR QQ-A-225/8 OR AMS 4080 OR AMS 4082 OR AMS 4083 OR ASTM B210 OR ASTM B241 receive it				120			S092703	Stock	7/12/2018	\$ 2.64 / ft	5	\$316.85	TW Metals	

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Job No	Accounting Container No	Container Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name
		6			M6061T6T0.750W.058	6061-T6 Round Tube .750 X .058W ; MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING AS PER WW-T-700/8 OR QQ-A-200/8 OR QQ-A-225/8 OR AMS 4080 OR AMS 4082 OR AMS 4083 OR ASTM B210 OR ASTM B241 receive ft				48		48		S092704	Stock	7/12/2018	\$ 3.00 / ft	5	\$143.93	TW Metals	
		7			M6061T6TS1.000CW.065	6061-T6 Sq Tube 1.00 X 1.00 X 0.065W Rounded Corners ; MATERIAL: 6061-T6 OR 6061-T651/T6510/T6511/T62 SQUARE TUBING AS PER AMS-QQ-A-225/8 OR AMS 41174/1284/115/4116 OR PER AMS-QQ-A-200/8 OR AMS 4160 receive ft				36		36		S092705	Stock	7/12/2018	\$ 9.80 / ft	5	\$352.80	TW Metals	
		8			M6061T6T1.000W.035	6061-T6 Round Tube 1" X .035" Wall ; MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING AS PER WW-T-700/8 OR QQ-A-200/8 OR QQ-A-225/8 OR AMS 4080 OR AMS 4082 OR AMS 4083 OR ASTM B210 OR ASTM B241 receive ft				12		12		S092706	Stock	7/12/2018	\$ 5.36 / ft	5	\$64.27	TW Metals	
		9			M6061T6T0.750W.125	6061-T6 Round Tube .750 X .125W ; MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING AS PER WW-T-700/8 OR QQ-A-200/8 OR QQ-A-225/8 OR AMS 4080 OR AMS 4082 OR AMS 4083 OR ASTM B210 OR ASTM B241 receive ft				12		12		S092707	Stock	7/12/2018	\$ 9.20 / ft	5	\$110.40	TW Metals	

Print

Plex 7/17/2018 11:25 AM *dad Tollis Andrew*



ORDER NO.: 60660313 FROM: CRAN PAGE 1

CUST NUMBER: 1203820 NET WGT: 107.903 REQ. DATE: 07/17/18 CONFIRMED  
 SOLD TO:  
 DART AEROSPACE LTD  
 1270 ABERDEEN ST  
 HAWKESBURY ON  
 CANADA CN K6A 1K7  
 SHIP TO:  
 DART AEROSPACE LTD  
 1270 ABERDEEN ST  
 HAWKESBURY ON  
 ONTARIO CANADA CN K6A 1K7

SALESPERSON: DONNA SMALLEY SHIP BY: 07/10/18  
 TERMS: NET 30 DAYS VIA: COMMON CARRIER  
 F.O.B.: SHIPPING POINT FREIGHT: PREPAID  
 CUST ORD NO.: PO040406 RELEASE NO.:  
 RECEIVING PHONE:

LINE	ITEM DESCRIPTION	WIDTH	LENGTH
0001	36506 SMLS CD 304/L A269 1/2 OD X .049 WA		20' ML

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	100.000 FT	100.000 FT	100.000 FT	23.592	

\*\* 1 TEST REPORTS REQUIRED \*\*  
 \*\* 1 CERTS REQUIRED \*\*

ECCN: 2B999.g Export License: NLR Expiration Date: 0/00/00  
 PO:49380769 HT:N171009AS12A PC: 5 CUSTOMER QTY: UOM  
 MLT:CHINA MFG:CHINA SLB/CL:180419769-10

0002 36860 SMLS CD 304/L A269 3/4 OD X .049 WA 20' CL

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	140.000 FT	140.000 FT	140.000 FT	51.341	

\*\* 1 TEST REPORTS REQUIRED \*\*  
 \*\* 1 CERTS REQUIRED \*\*

ECCN: 2B999.g Export License: NLR Expiration Date: 0/00/00  
 PO:49370267 HT:N170711AS10A PC: 7 CUSTOMER QTY: UOM  
 MLT:CHINA MFG:CHINA SLB/CL:17MTC-101704

0003 33047 CDS 4130 6736 3/4 X .049 17/24 FT

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	40.000 FT	37.000 FT	37.000 FT	13.569	

\*\* 1 TEST REPORTS REQUIRED \*\*  
 \*\* 1 CERTS REQUIRED \*\*

ECCN: 9A991.d Export License: NLR Expiration Date: 0/00/00  
 PO:49386235 HT:24211A PC: 2 CUSTOMER QTY: UOM  
 MLT:UNITED STATES MFG:UNITED STATES SLB/CL:162122



ORDER NO.: 60660313      FROM: CRAN      PAGE 2

**CUST NUMBER:** 1203820      **NET WGT:** 107.903      **REQ. DATE:** 07/17/18 CONFIRMED  
**SOLD TO:**  
DART AEROSPACE LTD  
1270 ABERDEEN ST  
HAWKESBURY ON  
CANADA      **CN K6A 1K7**      **SHIP TO:**  
DART AEROSPACE LTD  
1270 ABERDEEN ST  
HAWKESBURY ON  
ONTARIO CANADA      **CN K6A 1K7**

**SALESPERSON:** DONNA SMALLEY      **SHIP BY:** 07/10/18  
**TERMS:** NET 30 DAYS      **VIA:** COMMON CARRIER  
**F.O.B.:** SHIPPING POINT      **FREIGHT:** PREPAID  
**CUST ORD NO.:** PO040406      **RELEASE NO.:**  
**RECEIVING PHONE:**

LINE	ITEM DESCRIPTION	WIDTH	LENGTH
0004	41723 D6061-T6 5/16 OD X .058 WA	12 FT	ML

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	120.000 FT	120.000 FT	120.000 FT	6.552	

**\*\* 1 TEST REPORTS REQUIRED \*\***  
**\*\* 1 CERTS REQUIRED \*\***

**ECCN:** EAR99      **Export License:** NLR      **Expiration Date:** 0/00/00  
**PO:** 49380591 HT:2927553 M      **PC:** 10      **CUSTOMER QTY:** UOM  
**MLT:** UNITED STATES      **MFG:** UNITED STATES      **SLB/CL:** 475790

0005 41952 D6061-T6 3/8 OD X .058 WA      12 FT ML

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	120.000 FT	120.000 FT	120.000 FT	8.136	

**\*\* 1 TEST REPORTS REQUIRED \*\***  
**\*\* 1 CERTS REQUIRED \*\***

**ECCN:** EAR99      **Export License:** NLR      **Expiration Date:** 0/00/00  
**PO:** 49389319 HT:F002702540001 M      **PC:** 10      **CUSTOMER QTY:** UOM  
**MLT:** MFG:UNITED STATES      **SLB/CL:** 226113

0006 43160 D6061-T6 1 OD X .035 WA      12 FT ML

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	12.000 FT	12.000 FT	12.000 FT	1.499	

**\*\* 1 TEST REPORTS REQUIRED \*\***  
**\*\* 1 CERTS REQUIRED \*\***

**ECCN:** EAR99      **Export License:** NLR      **Expiration Date:** 0/00/00  
**PO:** 49383924 HT:F002630750001 M      **PC:** 1      **CUSTOMER QTY:** UOM  
**MLT:** UNITED STATES      **MFG:** UNITED STATES      **SLB/CL:** 225274



O'Neal High-Performance Metals Group

Packing  
Slip

ORDER NO.: 60660313 FROM: CRAN PAGE 3

CUST NUMBER: 1203820 NET WGT: 107.903 REQ. DATE: 07/17/18 CONFIRMED  
 SOLD TO: SHIP TO:  
 DART AEROSPACE LTD DART AEROSPACE LTD  
 1270 ABERDEEN ST 1270 ABERDEEN ST  
 HAWKESBURY ON HAWKESBURY ON  
 CANADA CN K6A 1K7 ONTARIO CANADA CN K6A 1K7

SALESPERSON: DONNA SMALLEY SHIP BY: 07/10/18  
 TERMS: NET 30 DAYS VIA: COMMON CARRIER  
 F.O.B.: SHIPPING POINT FREIGHT: PREPAID  
 CUST ORD NO.: PO040406 RELEASE NO.:  
 RECEIVING PHONE:

LINE	ITEM DESCRIPTION	WIDTH	LENGTH
0007	42558 D6061-T6 5/8 OD X .065 WA		12 FT ML

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	24.000 FT	24.000 FT	24.000 FT	3.214	

\*\* 1 TEST REPORTS REQUIRED \*\*  
 \*\* 1 CERTS REQUIRED \*\*

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00  
 PO:49386278 HT:F002660490001 PC: 2 CUSTOMER QTY: UOM  
 MLT:UNITED STATES MFG:UNITED STATES SLB/CL:225635

BROKERS KUEHNE AND NAGEL LTD

PACK INFO					
AREA	TYPE OF PKG	PKGS	GRS WEIGHT	WIDTH	LENGTH Hght
NEW PEN REDDICRATE		1.000	167.903	4.0000	246.0000 5
Orders In Package - 1		Box No -	TWPK18024228	CUBIC FT	2.8472
		1.000	167.903		

BY: Tom Weaver  
 RT 000-

UNLOAD TYPE: NONE SPECIFIED

DATE SHIPPED \_\_\_\_\_

1

DATE FILLED \_\_\_\_\_

THANK YOU FOR THIS ORDER

TERMS AND CONDITIONS APPLICABLE TO THE SALE OF THESE  
 PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL  
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<http://www.twmetals.com/invoice-terms.html>



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Packing  
Slip

ORDER NO.: 60660313      FROM: CRAN      PAGE 4

CUST NUMBER: 1203820	NET WGT:	107.903	REQ. DATE: 07/17/18	CONFIRMED
SOLD TO: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY ON CANADA		SHIP TO: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY ON ONTARIO CANADA		
CN K6A 1K7		CN K6A 1K7		
SALESPERSON:	DONNA SMALLEY	SHIP BY:	07/10/18	
TERMS:	NET 30 DAYS	27 ENGLEHARD DRIVE		
F.O.B.:	SHIPPING POINT	MONROE TWP	NJ 08831	
CUST ORD NO.:	PO040406			
VIA:	COMMON CARRIER			
FREIGHT:	PREPAID			
RELEASE NO.:				
RECEIVING PHONE:				

"TW Metals MSDS data is available on our web site at [www.twmetals.com](http://www.twmetals.com). MSDS data can be found under the Technical Resources Tab, Product Statistics & Data and the TW Metals MSDS's heading. If you do not have web site access you may telephone 610-458-1300 and we will mail or fax a copy of our current MSDS data to your location."

#### "CERTIFICATE OF CONFORMANCE"

"TW Metals certifies that the material supplied on this purchase order and contained in the heat/lot number referenced above has been manufactured, inspected, and tested in accordance with the material specification. These records are on file at TW Metals. Packaging material for shipments to Europe and China consists of manufactured wood products and complies with the European emergency measures for coniferous non-manufactured wood packing material"

Electronically Generated Certificate-Valid without signature Date: 7/09/18

These commodities have been exported from the United States in accordance with the U.S. export control laws, export administrations regulations. Diversion contrary to U.S. law prohibited.

**THANK YOU FOR THIS ORDER**

TERMS AND CONDITIONS APPLICABLE TO THE SALE OF THESE PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL REVIEW.  
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O'Neal High-Performance Metals Group



Packing  
Slip

ORDER NO.: 80944829 FROM: CHIC PAGE 1

CUST NUMBER: 1203820 NET WGT: 20.393 REQ. DATE: 07/17/18 CONFIRMED  
SOLD TO:  
DART AEROSPACE LTD  
1270 ABERDEEN ST  
HAWKESBURY ON  
CANADA CN K6A 1K7  
SHIP TO:  
DART AEROSPACE LTD  
1270 ABERDEEN ST  
HAWKESBURY ON  
ONTARIO CANADA CN K6A 1K7

SALESPERSON: DONNA SMALLEY SHIP BY: 07/10/18  
TERMS: NET 30 DAYS VIA: COMMON CARRIER  
F.O.B.: SHIPPING POINT FREIGHT: PREPAID  
CUST ORD NO.: P0040406 RELEASE NO.:  
RECEIVING PHONE:

LINE	ITEM DESCRIPTION	WIDTH	LENGTH
0001	42807 D6061-T6 3/4 OD X .058 WA	12 FT	ML

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	48.000 FT	48.000 FT	48.000 FT	7.102	4

\*\* 1 TEST REPORTS REQUIRED \*\*  
\*\* 1 CERTS REQUIRED \*\*

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00  
PO:49388916 HT: F00269835001 PC: 4 CUSTOMER QTY: UOM  
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:226020

0002 45936 D6061-T6 SQ-RC R.156 1 SQ X .065 WA 12 FT ML

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	36.000 FT	36.000 FT	36.000 FT	9.828	3

\*\* 1 TEST REPORTS REQUIRED \*\*  
\*\* 1 CERTS REQUIRED \*\*

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00  
PO:49386800 HT: 5391932 PC: 3 CUSTOMER QTY: UOM  
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:1000873303

0003 42891 D6061-T6 3/4 OD X .125 WA 12 FT ML

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	12.000 FT	12.000 FT	12.000 FT	3.463	1

\*\* 1 TEST REPORTS REQUIRED \*\*  
\*\* 1 CERTS REQUIRED \*\*

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00  
PO:49387366 HT: F00267223002 PC: 1 CUSTOMER QTY: UOM  
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:225794



O'Neal High-Performance Metals Group



Packing  
Slip

ORDER NO.: 80944829 FROM: CHIC PAGE 2

CUST NUMBER: 1203820 NET WGT: 20.393 REQ. DATE: 07/17/18 CONFIRMED  
SOLD TO:  
DART AEROSPACE LTD  
1270 ABERDEEN ST  
HAWKESBURY ON  
CANADA CN K6A 1K7  
SHIP TO:  
DART AEROSPACE LTD  
1270 ABERDEEN ST  
HAWKESBURY ON  
ONTARIO CANADA CN K6A 1K7

SALESPERSON: DONNA SMALLEY  
TERMS: NET 30 DAYS  
F.O.B.: SHIPPING POINT  
CUST ORD NO.: P0040406  
SHIP BY: 07/10/18  
VIA: COMMON CARRIER  
FREIGHT: PREPAID  
RELEASE NO.:  
RECEIVING PHONE:

LINE ITEM DESCRIPTION  
BROKERS KUEHNE AND NAGEL LTD

		PACK INFO					
AREA	TYPE OF PKG	PKGS	GRS	WEIGHT	WIDTH	LENGTH	HGHT
YRC	REDDICRATE	1.000		45.000	4.0000	150.0000	4
						CUBIC FT	1.3889

1.000 45.000

UNLOAD TYPE: NONE SPECIFIED

BY: CL  
RT 000-

DATE SHIPPED \_\_\_\_\_

1

DATE FILLED \_\_\_\_\_

THANK YOU FOR THIS ORDER

TERMS AND CONDITIONS APPLICABLE TO THE SALE OF THESE  
PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL  
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O'Neal High-Performance Metals Group



Packing  
Slip

ORDER NO.: 80944829 FROM: CHIC PAGE 3

CUST NUMBER: 1203820 NET WGT: 20.393 REQ. DATE: 07/17/18 CONFIRMED  
SOLD TO: SHIP TO:  
DART AEROSPACE LTD DART AEROSPACE LTD  
1270 ABERDEEN ST 1270 ABERDEEN ST  
HAWKESBURY ON HAWKESBURY ON  
CANADA CN K6A 1K7 ONTARIO CANADA CN K6A 1K7

SALESPERSON: DONNA SMALLEY SHIP BY: 07/10/18  
TERMS: NET 30 DAYS 235 TUBEWAY  
F.O.B.: SHIPPING POINT CAROL STREAM IL 60188  
CUST ORD NO.: PO040406  
VIA: COMMON CARRIER  
FREIGHT: PREPAID  
RELEASE NO.:  
RECEIVING PHONE:

"TW Metals MSDS data is available on our web site at [www.twmetals.com](http://www.twmetals.com). MSDS data can be found under the Technical Resources Tab, Product Statistics & Data and the TW Metals MSDS's heading. If you do not have web site access you may telephone 610-458-1300 and we will mail or fax a copy of our current MSDS data to your location."

"CERTIFICATE OF CONFORMANCE"

"TW Metals certifies that the material supplied on this purchase order and contained in the heat/lot number referenced above has been manufactured, inspected, and tested in accordance with the material specification. These records are on file at TW Metals. Packaging material for shipments to Europe and China consists of manufactured wood products and complies with the European emergency measures for coniferous non-manufactured wood packing material"

Authorized Test Report Clerk

Date: 7/10/18

These commodities have been exported from the United States in accordance with the U.S. export control laws, export administrations regulations. Diversion contrary to U.S. law prohibited.

THANK YOU FOR THIS ORDER

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PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL  
REVIEW.  
<http://www.twmetals.com/invoice-terms.html>



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

**PURCHASE ORDER  
PO040406**

**Supplier:** TWM001-VU  
TW Metals  
PO Box 933014  
Atlanta, GA 31193-3014 USA  
Phone: 585 768 5600  
Fax: 585 768 5601

**PO No:** PO040406

**PO Date:** 7/5/18

**Due Date:** 7/17/18

**Purchase Order  
Revision:**

**Revision Date:**

**Ship-To Contact:** Lavoie, Chantal  
Phone: clavoie@dartaero.com

**E-MAILED**  
JUL 05 2018

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**Via:** Ground

**Pymt Terms:** Net 30

**Freight Terms:**

**Special Comments:**

**Items**

Line Item	Job	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1		M304TR0.500W.049		304 Round Tube .500 X .049W : MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING AS PER ASTM A213 OR ASME SA213 OR ASTM A269 receive ft	Firmed	7/17/18	100 ft	0 ft	100 ft	\$2.7998/ft	\$279.98
2		M304TR0.750W.049		304 Round Tube .750 X .049W : MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING AS PER ASTM A213 OR ASME SA213 OR ASTM A269 receive ft	Firmed	7/17/18	140 ft	0 ft	140 ft	\$2.579/ft	\$361.06
3		M4130NT0.750W.049		4130 Round Tube .750 X.049W : MATERIAL: AISI 4130N STEEL TUBING AS PER MIL-T-6736 OR AMS 6371/6360/6361/6362 6373/6374 receive ft	Firmed	7/17/18	40 ft	0 ft	40 ft	\$6.00/ft	\$240.00

Items											
Line Item	Job	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
4 A1		M6061T6T0.3125W.058		Aluminum Tube .3125 X .058W : MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING AS PER WW-T-700/8 OR QQ-A-200/8 OR QQ-A-225/8 OR AMS 4080 OR AMS 40 82 OR AMS 4083 OR ASTM B210 OR ASTM B241 receive ft	Firmed	7/17/18	120 ft	0 ft 120 ft	\$3.0789/ft	\$369.47	
5 A1		M6061T6T0.375W.058		6061-T6 Round Tube .375 X .058W : MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING AS PER WW-T-700/8 OR QQ-A-200/8 OR QQ-A-225/8 OR AMS 4080 OR AMS 40 82 OR AMS 4083 OR ASTM B210 OR ASTM B241 receive ft	Firmed	7/17/18	120 ft	0 ft 120 ft	\$2.6404/ft	\$316.85	
6 A1		M6061T6T0.750W.058		6061-T6 Round Tube .750 X .058W : MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING AS PER WW-T-700/8 OR QQ-A-200/8 OR QQ-A-225/8 OR AMS 4080 OR AMS 40 82 OR AMS 4083 OR ASTM B210 OR ASTM B241 receive ft	Firmed	7/17/18	48 ft	0 ft 48 ft	\$2.9985/ft	\$143.93	
7 A1		M6061T6TS1.000W.065		6061T6 Sq Tube 1.00 X 1.00 X 0.065W Rounded Corners : MATERIAL: 6061-T6 OR 6061-T651/T6510/T6511/T62 SQUARE TUBING AS PER AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR PER AMS-QQ-A-200/8 OR AMS 4160 receive ft	Firmed	7/17/18	36 ft	0 ft 36 ft	\$9.80/ft	\$352.80	
8 A1		M6061T6T1.000W.035		6061-T6 Round Tube 1" X .035" Wall : MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING AS PER WW-T-700/8 OR QQ-A-200/8 OR QQ-A-225/8 OR AMS 4080 OR AMS 40 82 OR AMS 4083 OR ASTM B210 OR ASTM B241 receive ft	Firmed	7/17/18	12 ft	0 ft 12 ft	\$5.3559/ft	\$64.27	

Items											
Line Item	Job	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
9		M6061T6T0.750W.125		6061-T6 Round Tube .750 X .125W : MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING AS PER WW-T-700/8 OR QQ-A-200/8 OR QQ-A-225/8 OR AMS 4080 OR AMS 40 82 OR AMS 4083 OR ASTM B210 OR ASTM B241 receive ft	Firmed	7/17/18	12 ft	0 ft	12 ft	\$9.20/ft	\$110.40
10		M6061T6T0.625W.065		6061-T6 Round Tube .625 X .065W : MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING AS PER WW-T-700/8 OR QQ-A-200/8 OR QQ-A-225/8 OR AMS 4080 OR AMS 40 82 OR AMS 4083 OR ASTM B210 OR ASTM B241 receive ft	Firmed	7/17/18	24 ft	0 ft	24 ft	\$3.1499/ft	\$75.60

Grand Total: \$2,314.35

## Order Notes

rec'd 7/18/2017



## Procurement Quality Clauses

- A005 right of entry
- A012 chemical and physical test report
- A016 personnel qualification
- A017 raw material identification (as applicable)
- A026 certification of material conformance
- A041 quality management system
- A042 dart notification by supplier
- A043 retention of quality documents
- A048 counterfeit parts avoidance, detection, mitigation and disposition program
- A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Plex 7/5/18 8:18 AM dart.lavoie.chantal



27 ENGLEHARD DRIVE  
MONROE TWP NJ 08831  
Tel: 609-655-4120  
FAX: 6096552603

Invoice#: 60660313  
Cust. PO#: PO040406  
Incoterms: SHIPPING POINT  
Frt. Terms: PREPAID  
Ship Via: COMMON CARRIER

### COMMERCIAL INVOICE

Sold To: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY ON CANADA CN K6A 1K7 C  Contact: CHANTAL 16136321053	Invoice Date: 7/10/18  Ship Date: 7/09/18  Payment Terms: NET 30 DAYS  Ship To/Final Destination: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY ON ONTARIO CANADA CN K6A 1K7
Freight Forwarder/Intermediate Ship To:	

ITEM# / LINE#	DESCRIPTION	QUANTITY	UNIT VALUE	SUBTOTAL
36506	SMLS CD 304/L A269 1/2 OD X .049 WA  1 STAINLESS STEEL TUBE ROUND  PART NUMBER:  ECCN: 2B999.g SCHEDULE B:7304.41.0000 S/S PIPE/TUBE ROUND SMLS W/OD </=3"  NET WGT: 23.592 LBS COUNTRY OF MFG: CHINA	100.000 FT 0 IN 5.000 PC	\$ 2.8000 FT	\$ 280.00
36860	SMLS CD 304/L A269 3/4 OD X .049 WA  2 STAINLESS STEEL TUBE ROUND  PART NUMBER:  ECCN: 2B999.g SCHEDULE B:7304.11.0000	140.000 FT 0 IN 7.000 PC	\$ 2.5700 FT	\$ 359.80
	EXPORT LICENSE NUMBER: NLR EXPIRATION DATE: 00/00/00			
	TW METALS, LLC CERTIFIES THAT THE COUNTRY OR COUNTRIES OF MANUFACTURE INDICATED ABOVE IS TRUE AND CORRECT AS CONTAINED IN THE RECORDS OF TW METALS, LLC.  THESE ITEMS ARE CONTROLLED BY THE U.S. GOVERNMENT AND AUTHORIZED FOR EXPORT ONLY TO THE COUNTRY OF ULTIMATE DESTINATION FOR USE BY THE ULTIMATE CONSIGNEE OR END-USER(S) HEREIN IDENTIFIED. THEY MAY NOT BE RESOLD, TRANSFERRED, OR OTHERWISE DISPOSED OF, TO ANY OTHER COUNTRY OR TO ANY PERSON OTHER THAN THE AUTHORIZED ULTIMATE CONSIGNEE OR END-USER(S), EITHER IN THEIR ORIGINAL FORM OR AFTER BEING INCORPORATED INTO OTHER ITEMS, WITHOUT FIRST OBTAINING APPROVAL FROM THE U.S. GOVERNMENT OR AS OTHERWISE AUTHORIZED BY U.S. LAW AND REGULATIONS.			CONTINUE



27 ENGLEHARD DRIVE  
MONROE TWP NJ 08831  
Tel: 609-655-4120  
FAX: 6096552603

Invoice#: 60660313  
Cust. PO#: P0040406  
Incoterms: SHIPPING POINT  
Frt. Terms: PREPAID  
Ship Via: COMMON CARRIER

### COMMERCIAL INVOICE

Sold To: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKSBURY ON CANADA CN K6A 1K7 C Contact: CHANTAL 16136321053	Invoice Date: 7/10/18 Ship Date: 7/09/18 Payment Terms: NET 30 DAYS Ship To/Final Destination: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKSBURY ON ONTARIO CANADA CN K6A 1K7
Freight Forwarder/Intermediate Ship To:	

ITEM# / LINE#	DESCRIPTION	QUANTITY	UNIT VALUE	SUBTOTAL
	NET WGT: 51.341 LBS COUNTRY OF MFG: CHINA			
33047	CDS 4130 6736 3/4 X .049 3 ALLOY TUBE ROUND PART NUMBER: ECCN: 9A991.d SCHEDULE B:7304.51.0000 ALLOY TUBE ROUND SMLS W/OD </=3"	37.000 FT 0 IN 2.000 PC	\$ 6.0000 FT	\$ 222.00
41723	NET WGT: 13.569 LBS COUNTRY OF MFG: UNITED STATES D6061-T6 5/16 OD X .058 WA 4 ALUMINUM TUBE ROUND PART NUMBER: EXPORT LICENSE NUMBER: NLR EXPIRATION DATE: 00/00/00	120.000 FT 0 IN 10.000 PC	\$ 3.0800 FT	\$ 369.60
	TW METALS, LLC CERTIFIES THAT THE COUNTRY OR COUNTRIES OF MANUFACTURE INDICATED ABOVE IS TRUE AND CORRECT AS CONTAINED IN THE RECORDS OF TW METALS, LLC. THESE ITEMS ARE CONTROLLED BY THE U.S. GOVERNMENT AND AUTHORIZED FOR EXPORT ONLY TO THE COUNTRY OF ULTIMATE DESTINATION FOR USE BY THE ULTIMATE CONSIGNEE OR END-USER(S) HEREIN IDENTIFIED. THEY MAY NOT BE RESOLD, TRANSFERRED, OR OTHERWISE DISPOSED OF, TO ANY OTHER COUNTRY OR TO ANY PERSON OTHER THAN THE AUTHORIZED ULTIMATE CONSIGNEE OR END-USER(S), EITHER IN THEIR ORIGINAL FORM OR AFTER BEING INCORPORATED INTO OTHER ITEMS, WITHOUT FIRST OBTAINING APPROVAL FROM THE U.S. GOVERNMENT OR AS OTHERWISE AUTHORIZED BY U.S. LAW AND REGULATIONS.			CONTINUE



27 ENGLEHARD DRIVE  
MONROE TWP NJ 08831  
Tel: 609-655-4120  
FAX: 6096552603

Invoice#: 60660313  
Cust. PO#: PO040406  
Incoterms: SHIPPING POINT  
Frt. Terms: PREPAID  
Ship Via: COMMON CARRIER

### COMMERCIAL INVOICE

Sold To: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKSBURY ON CANADA CN K6A 1K7 C Contact: CHANTAL 16136321053	Invoice Date: 7/10/18 Ship Date: 7/09/18 Payment Terms: NET 30 DAYS Ship To/Final Destination: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKSBURY ON ONTARIO CANADA CN K6A 1K7
Freight Forwarder/Intermediate Ship To:	

ITEM# / LINE#	DESCRIPTION	QUANTITY	UNIT VALUE	SUBTOTAL
41952	ECCN: EAR99 SCHEDULE B:7608.20.0030 ALUM PIPE/TUBE - SEAMLESS  NET WGT: 6.552 LBS COUNTRY OF MFG: UNITED STATES  D6061-T6 3/8 OD X .058 WA	120.000 FT 0 IN 10.000 PC	\$ 2.6400 FT	\$ 316.80
5	ALUMINUM TUBE ROUND  PART NUMBER:  ECCN: EAR99 SCHEDULE B:7608.20.0030 ALUM PIPE/TUBE - SEAMLESS  NET WGT: 8.136 LBS COUNTRY OF MFG: UNITED STATES  D6061-T6 1 OD X .035 WA			
43160		12.000 FT	\$ 5.3500 FT	\$ 64.20
	EXPORT LICENSE NUMBER: NLR EXPIRATION DATE: 00/00/00  TW METALS, LLC CERTIFIES THAT THE COUNTRY OR COUNTRIES OF MANUFACTURE INDICATED ABOVE IS TRUE AND CORRECT AS CONTAINED IN THE RECORDS OF TW METALS, LLC.  THESE ITEMS ARE CONTROLLED BY THE U.S. GOVERNMENT AND AUTHORIZED FOR EXPORT ONLY TO THE COUNTRY OF ULTIMATE DESTINATION FOR USE BY THE ULTIMATE CONSIGNEE OR END-USER(S) HEREIN IDENTIFIED. THEY MAY NOT BE RESOLD, TRANSFERRED, OR OTHERWISE DISPOSED OF, TO ANY OTHER COUNTRY OR TO ANY PERSON OTHER THAN THE AUTHORIZED ULTIMATE CONSIGNEE OR END-USER(S), EITHER IN THEIR ORIGINAL FORM OR AFTER BEING INCORPORATED INTO OTHER ITEMS, WITHOUT FIRST OBTAINING APPROVAL FROM THE U.S. GOVERNMENT OR AS OTHERWISE AUTHORIZED BY U.S. LAW AND REGULATIONS.			CONTINUE



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Invoice#: 60660313  
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Sold To: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKSBURY ON CANADA CN K6A 1K7 C Contact: CHANTAL 16136321053	Invoice Date: 7/10/18 Ship Date: 7/09/18 Payment Terms: NET 30 DAYS Ship To/Final Destination: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKSBURY ON ONTARIO CANADA CN K6A 1K7
Freight Forwarder/Intermediate Ship To:	

ITEM# / LINE#	DESCRIPTION	QUANTITY	UNIT VALUE	SUBTOTAL
6	ALUMINUM TUBE ROUND  PART NUMBER:  ECCN: EAR99 SCHEDULE B:7608.20.0030 ALUM PIPE/TUBE - SEAMLESS  NET WGT: 1.499 LBS COUNTRY OF MFG: UNITED STATES	0 IN 1.000 PC		
42558	D6061-T6 5/8 OD X .065 WA  ALUMINUM TUBE ROUND  PART NUMBER:  ECCN: EAR99 SCHEDULE B:7608.20.0030 ALUM PIPE/TUBE - SEAMLESS  NET WGT: 3.214 LBS COUNTRY OF MFG: UNITED STATES	24.000 FT 0 IN 2.000 PC	\$ 3.1500 FT \$	75.60
7	EXPORT LICENSE NUMBER: NLR EXPIRATION DATE: 00/00/00			
	TW METALS, LLC CERTIFIES THAT THE COUNTRY OR COUNTRIES OF MANUFACTURE INDICATED ABOVE IS TRUE AND CORRECT AS CONTAINED IN THE RECORDS OF TW METALS, LLC.  THESE ITEMS ARE CONTROLLED BY THE U.S. GOVERNMENT AND AUTHORIZED FOR EXPORT ONLY TO THE COUNTRY OF ULTIMATE DESTINATION FOR USE BY THE ULTIMATE CONSIGNEE OR END-USER(S) HEREIN IDENTIFIED. THEY MAY NOT BE RESOLD, TRANSFERRED, OR OTHERWISE DISPOSED OF, TO ANY OTHER COUNTRY OR TO ANY PERSON OTHER THAN THE AUTHORIZED ULTIMATE CONSIGNEE OR END-USER(S), EITHER IN THEIR ORIGINAL FORM OR AFTER BEING INCORPORATED INTO OTHER ITEMS, WITHOUT FIRST OBTAINING APPROVAL FROM THE U.S. GOVERNMENT OR AS OTHERWISE AUTHORIZED BY U.S. LAW AND REGULATIONS.		CONTINUE	



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### COMMERCIAL INVOICE

Sold To: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY ON CANADA CN K6A 1K7 C Contact: CHANTAL 16136321053	Invoice Date: 7/10/18 Ship Date: 7/09/18 Payment Terms: NET 30 DAYS Ship To/Final Destination: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY ON ONTARIO CANADA CN K6A 1K7
--	---

ITEM# / LINE#	DESCRIPTION	QUANTITY	UNIT VALUE	SUBTOTAL
	QUANTITY AND TYPE OF BOXES:  1 REDDICRATE  246.0000 X 4.0000 X 5.0000 TOTAL WGT: 167.903 LBS GROSS WGT: 167.903 LBS			
	EXPORT LICENSE NUMBER: NLR EXPIRATION DATE: 00/00/00			
	TW METALS, LLC CERTIFIES THAT THE COUNTRY OR COUNTRIES OF MANUFACTURE INDICATED ABOVE IS TRUE AND CORRECT AS CONTAINED IN THE RECORDS OF TW METALS, LLC.  THESE ITEMS ARE CONTROLLED BY THE U.S. GOVERNMENT AND AUTHORIZED FOR EXPORT ONLY TO THE COUNTRY OF ULTIMATE DESTINATION FOR USE BY THE ULTIMATE CONSIGNEE OR END-USER(S) HEREIN IDENTIFIED. THEY MAY NOT BE RESOLD, TRANSFERRED, OR OTHERWISE DISPOSED OF, TO ANY OTHER COUNTRY OR TO ANY PERSON OTHER THAN THE AUTHORIZED ULTIMATE CONSIGNEE OR END-USER(S), EITHER IN THEIR ORIGINAL FORM OR AFTER BEING INCORPORATED INTO OTHER ITEMS, WITHOUT FIRST OBTAINING APPROVAL FROM THE U.S. GOVERNMENT OR AS OTHERWISE AUTHORIZED BY U.S. LAW AND REGULATIONS.		Sales Tax Payable in US Dollars	.00 1688.00
	Page 5			



235 TUBEWAY  
CAROL STREAM IL 60188  
Tel: 630-690-0110  
FAX: 16306902105

Invoice#: 80944829  
Cust. PO#: PO040406  
Incoterms: SHIPPING POINT  
Frt. Terms: PREPAID  
Ship Via: COMMON CARRIER

### COMMERCIAL INVOICE

Sold To: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKSBURY ON CANADA CN K6A 1K7 C  Contact: CHANTAL 16136321053	Invoice Date: 7/10/18  Ship Date: 7/10/18  Payment Terms: NET 30 DAYS  Ship To/Final Destination:  DART AEROSPACE LTD 1270 ABERDEEN ST HAWKSBURY ON ONTARIO CANADA CN K6A 1K7
Freight Forwarder/Intermediate Ship To:	

ITEM#/ LINE#	DESCRIPTION	QUANTITY	UNIT VALUE	SUBTOTAL
42807	D6061-T6 3/4 OD X .058 WA  1 ALUMINUM TUBE ROUND  PART NUMBER:  ECCN: EAR99 SCHEDULE B:7608.20.0030 ALUM PIPE/TUBE - SEAMLESS  NET WGT: 7.102 LBS COUNTRY OF MFG: UNITED STATES	48.000 FT 0 IN 4.000 PC	\$ 3.0000 FT	\$ 144.00
45936	D6061-T6 SQ-RC R.156 1 SQ X .065 WA  2 ALUMINUM TUBE SQUARE  PART NUMBER:  ECCN: EAR99	36.000 FT 0 IN 3.000 PC	\$ 9.8000 FT	\$ 352.80
<i>Cynthia Johnson</i> 7/10/18				
EXPORT LICENSE NUMBER: NLR EXPIRATION DATE: 00/00/00				
TW METALS, LLC CERTIFIES THAT THE COUNTRY OR COUNTRIES OF MANUFACTURE INDICATED ABOVE IS TRUE AND CORRECT AS CONTAINED IN THE RECORDS OF TW METALS, LLC.  THESE ITEMS ARE CONTROLLED BY THE U.S. GOVERNMENT AND AUTHORIZED FOR EXPORT ONLY TO THE COUNTRY OF ULTIMATE DESTINATION FOR USE BY THE ULTIMATE CONSIGNEE OR END-USER(S) HEREIN IDENTIFIED. THEY MAY NOT BE RESOLD, TRANSFERRED, OR OTHERWISE DISPOSED OF, TO ANY OTHER COUNTRY OR TO ANY PERSON OTHER THAN THE AUTHORIZED ULTIMATE CONSIGNEE OR END-USER(S), EITHER IN THEIR ORIGINAL FORM OR AFTER BEING INCORPORATED INTO OTHER ITEMS, WITHOUT FIRST OBTAINING APPROVAL FROM THE U.S. GOVERNMENT OR AS OTHERWISE AUTHORIZED BY U.S. LAW AND REGULATIONS.			CONTINUE	



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Tel: 630-690-0110  
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Frt. Terms: PREPAID  
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Freight Forwarder/Intermediate Ship To:	

ITEM# / LINE#	DESCRIPTION	QUANTITY	UNIT VALUE	SUBTOTAL
	NET WGT: 9.828 LBS COUNTRY OF MFG: UNITED STATES			
42891	D6061-T6 3/4 OD X .125 WA  3 ALUMINUM TUBE ROUND	12.000 FT 0 IN 1.000 PC	\$ 9.2000 FT	\$ 110.40
	PART NUMBER:  ECCN: EAR99 SCHEDULE B: 7608.20.0030 ALUM PIPE/TUBE - SEAMLESS			
	NET WGT: 3.463 LBS COUNTRY OF MFG: UNITED STATES FREIGHT CHARGES			.00
	QUANTITY AND TYPE OF BOXES:  1 REDDICRATE  150.0000 X 4.0000 X 4.0000			
	EXPORT LICENSE NUMBER: NLR EXPIRATION DATE: 00/00/00			
	TW METALS, LLC CERTIFIES THAT THE COUNTRY OR COUNTRIES OF MANUFACTURE INDICATED ABOVE IS TRUE AND CORRECT AS CONTAINED IN THE RECORDS OF TW METALS, LLC.			
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235 TUBEWAY  
CAROL STREAM IL 60188  
Tel: 630-690-0110  
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Invoice#: 80944829  
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Freight Forwarder/Intermediate Ship To:	

ITEM# / LINE#	DESCRIPTION	QUANTITY	UNIT VALUE	SUBTOTAL
	TOTAL WGT: 20.000 LBS GROSS WGT: 45.000 LBS			
	EXPORT LICENSE NUMBER: NLR EXPIRATION DATE: 00/00/00			
	TW METALS, LLC CERTIFIES THAT THE COUNTRY OR COUNTRIES OF MANUFACTURE INDICATED ABOVE IS TRUE AND CORRECT AS CONTAINED IN THE RECORDS OF TW METALS, LLC.			
	THESE ITEMS ARE CONTROLLED BY THE U.S. GOVERNMENT AND AUTHORIZED FOR EXPORT ONLY TO THE COUNTRY OF ULTIMATE DESTINATION FOR USE BY THE ULTIMATE CONSIGNEE OR END-USER(S) HEREIN IDENTIFIED. THEY MAY NOT BE RESOLD, TRANSFERRED, OR OTHERWISE DISPOSED OF, TO ANY OTHER COUNTRY OR TO ANY PERSON OTHER THAN THE AUTHORIZED ULTIMATE CONSIGNEE OR END-USER(S), EITHER IN THEIR ORIGINAL FORM OR AFTER BEING INCORPORATED INTO OTHER ITEMS, WITHOUT FIRST OBTAINING APPROVAL FROM THE U.S. GOVERNMENT OR AS OTHERWISE AUTHORIZED BY U.S. LAW AND REGULATIONS.		Sales Tax Payable in US Dollars	.00 607.20
		Page	3	



# JIAXING MT STAINLESS STEEL CO.,LTD

## MILL TEST CERTIFICATE

EN10204 3.1 CERTIFICATE

CERTIFICATE NO.: 18MTC-180419769-10

SALES CONTRACT NO.: M 49380769

COMMODITY: STAINLESS STEEL SEAMLESS TUBE

SPECIFICATION: ASTM A269-15a, ASTM A213-17, ASME SA213-17

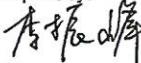


Precisely Right.

PURCHASER: KASUGAI CO., LTD.

ORDER: M 49380769

DATE OF REPORT: 2018-4-19

Steel Grade	Heat No.	Dimensions			Quantity		Process	Delivery Condition	Macroscopic Inspection							
		O.D. (INCH)	W.T. (INCH)	Length (FT)	FT	Piece			End Cut	Appearance						
TP304/TP304L	N171009AS12	1/2	0.049	20	10460	523	Cold-Drawn	Pickled & 320 Grit polish	Passed	Passed						
Chemical Composition (W.T. %)																
Element	C	Si	Mn	P	S	Cr	Ni	Mo	Ti	-						
Requirements	≤0.035	≤1.00	≤2.00	≤0.045	≤0.030	18.0-20.0	8.0-11.0	-	-	-						
Ladle Analysis	0.014	0.38	1.34	0.031	0.001	18.21	8.04	-	-	-						
Mechanical Properties																
Test Item	Y.S. (MPa) Rp0.2	T.S. (MPa) Rm	EL. (%) In2in		Reduction of Area Z (%)	Hardness	Cold Bend Test	Flaring Test	Flattening Test	P.M.I. TEST						
Requirements	≥205	≥515	≥35		-	≤80	-	-	-	e=0.09						
Test Results	290	605	60		-	77	Passed	Passed	Passed	Passed						
Test Item	Non Destructive Tests				Remarks											
	Eddy Current Test				<ul style="list-style-type: none"> <li>- ASTM A269-15a, ASTM A213-17, ASME SA213-17</li> <li>- TUBES TESTED PER ASTM A1016/1016M</li> <li>- SOLUTION HEAT TREATMENT: 1050°C X 1.5m/min</li> <li>- NO WELD REPAIR WAS PERFORMED.</li> <li>- PMI TESTING DONE ON EACH TUBE - SATISFACTORY</li> <li>- IN COMPLIANCE WITH NACE MR0175/ISO 15156-2015</li> <li>- FREE FROM MERCURY CONTAMINATION</li> <li>- MATERIAL IS FREE FROM RADIOACTIVITY</li> <li>- VISUAL CHECK IS SATISFACTORY</li> <li>- COUNTRY OF ORIGIN: CHINA</li> <li>- COUNTRY OF MELT: CHINA</li> </ul>											
Requirements	ASTM E 426				JUN 08 2018											
Test Results	Passed				Eric T. ACCEPTED BY											
1. WE HERE BY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND THE TEST RESULTS ARE IN COMPLIANCE WITH THE TERMS OF THE PURCHASE ORDER OR CONTRACT					Prepared by:			Approved by:								
2. THE CERTIFICATE SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE COMPANY.																

## SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING  
SPECIFICATION: ASTM A213 OR ASME SA213 OR ASTM A289

WALL THICKNESS TOLERANCE PER ASTM A289 AS FOLLOWS:

OD (IN)	PERMISSABLE OD TOL (IN)	PERMISSABLE WALL TOL
UP TO $\frac{3}{8}$	$\pm 0.005$	$\pm 15\%$
$\frac{1}{2}$ TO $1\frac{1}{4}$ , EXCL.	$\pm 0.005$	$\pm 10\%$
$1\frac{1}{2}$ TO $3\frac{1}{2}$ , EXCL.	$\pm 0.010$	$\pm 10\%$
$3\frac{1}{2}$ TO $5\frac{1}{2}$ , EXCL.	$\pm 0.015$	$\pm 10\%$
$5\frac{1}{2}$ TO 8, EXCL.	$\pm 0.030$	$\pm 10\%$

PART NUMBER:

M304TR|D|DD|W|TTT|  
OD|WALL|

WHERE "D" = OUTSIDE DIAMETER IN INCHES  
AND "TTT" = WALL THICKNESS IN INCHES

EG: 0.375" OD X 0.065" WALL TUBING = M304TR 0.375W.065

**RELEASED**  
8/23/04

B		REF FOR 08-020A		CP		08-10-20	
A		NEW ISSUE		DS		01-08-09	
REV							
DESIGN							
DRAWN							
CHECKED							
MFG. APPR							
APPROVED							
DE APPR							
DATE							

A		REF FOR 08-020A		CP		08-10-20	
B		NEW ISSUE		DS		01-08-09	
REV							
DESIGN							
DRAWN							
CHECKED							
MFG. APPR							
APPROVED							
DE APPR							
DATE							

A		REF FOR 08-020A		CP		08-10-20	
B		NEW ISSUE		DS		01-08-09	
REV							
DESIGN							
DRAWN							
CHECKED							
MFG. APPR							
APPROVED							
DE APPR							
DATE							

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304TK0.500W,049  
 DATE: 18/07/17

PO / BATCH NO.: P0040406/5092649

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 100  
 QUANTITY INSPECTED: 100  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.500"  
 THICKNESS RECEIVED: 0.500"  
 SHEET SIZE ORDERED: —  
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
	Y	N	
SURFACE DAMAGE	Y	N	
CORRECT FINISH	Y	N	
CORROSION	Y	N	
CORRECT GRAIN DIRECTION	Y	N	
CORRECT MATERIAL PER M-DRAWING	Y	N	ASTM A269
CORRECT THICKNESS	Y	N	
PHOTO REQUIRED	Y	N	
CORRECT REF # TO LINK CERT	Y	N	HT: N171009 AS12
CORRECT MATERIAL IDENTIFICATION	Y	N	
CORRECT M# ON THE MATERIAL	Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

*testers located in the Quality Office*

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/07/17</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# MTCR

## JIAXING MT STAINLESS STEEL CO.,LTD

### MILL TEST CERTIFICATE

EN10204 3.1 CERTIFICATE  
 ISO 9001: 2008 TUV SUD CERT REGISTRATION No.: 01 100 095954  
 PED/97/23/CE EURO CERT CERTIFICATE NO.:CN.CE.1110S1-02/14

CERTIFICATE NO.: 17MTC-101704

SALES CONTRACT NO.: M 49370267

COMMODITY: STAINLESS STEEL SEAMLESS PIPE

SPECIFICATION: ASTM A213-15c ASTM A269-15a, ASME SA213-15 AVG WALL

Steel Grade	Heat No.	Dimensions			Chemical Composition (W.T. %)						Macroscopic Inspection		
		O.D. (INCH)	W.T. (INCH)	Length (ft)	FT	Piece	Process	Delivery Condition	End Cut	Appearance			
TP304/304L	NI170711AS10	3/4	0.049	20	6760	338	Cold-Drawn & Annealed & Pickled & 320 Grit min	Passed	Passed	Passed			

Element	C	Si	Mn	P	S	Cr	Ni	Mo	Ti	-	Mechanical Properties				
											Reduction of Area Z(%)	Hardness HRB	Cold Bend Test	Flaring Test	Flattening Test
Requirements	≤0.035	≤1.00	≤2.00	≤0.045	≤0.030	18.0-20.0	8.0-12.0	-	-	-	-	-	-	-	-
Ladle Analysis	0.017	0.34	1.32	0.027	0.001	18.13	8.01	2.05	-	-	-	-	-	-	-

#### Non Destructive Tests

Test Item	Y.S. (MPa) Rm0.2 Rm	T.S. (MPa) Rm ≥485	EL. (%) In2in ≥35	Test	Remarks:
Requirements	≥170				- ASTM A213-15c/ASTM A269-15a, ASME SA213-15 AVG WALL - PIPES TESTED PER ASHT A1016 - SOLUTION HEAT TREATMENT: 1050°C X 1.5m/min - NO WELD REPAIR WAS PERFORMED.
Test Results	260	625	55		- P.M.I. TESTING DONE ON EACH PIPE - SATISFACTORY
					- IN COMPLIANCE WITH NACE MR0175/ISO 15156-2015 - FREE FROM MERCURY CONTAMINATION - MATERIAL IS FREE FROM RADIOACTIVITY - VISUAL CHECK IS SATISFACTORY - COUNTRY OF ORIGIN: CHINA - COUNTRY OF MELT: CHINA

Test Item	Eddy Current Test	ASTM E 426	Passed	Approved by:
Requirements				

1. WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND THE TEST RESULTS ARE IN COMPLIANCE WITH THE TERMS OF THE PURCHASE ORDER OR CONTRACT  
 2. THE CERTIFICATE SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE COMPANY.

TW METALS	
RECEIVED	ON
TE	FFB 2 1 2018
ST	2018
New Jersey	
ACCEPTED BY	

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL AISI 304 316 SS SEAMLESS ROUND TUBING  
SPECIFICATION: 

ASTM A213 OR ASME SA213 OR ASTM A289

WALL THICKNESS TOLERANCE PER ASTM A289 AS FOLLOWS:

OD (IN)	OD TOL (IN)	PERMISSABLE WALL TOL
UP TO $1\frac{1}{2}$	$\pm 0.005$	$\pm 15\%$
$\frac{1}{2}$ TO $1\frac{1}{2}$ , EXCL.	$\pm 0.005$	$\pm 10\%$
$1\frac{1}{2}$ TO $3\frac{1}{2}$ , EXCL.	$\pm 0.010$	$\pm 10\%$
$3\frac{1}{2}$ TO $5\frac{1}{2}$ , EXCL.	$\pm 0.015$	$\pm 10\%$
$5\frac{1}{2}$ TO 8, EXCL.	$\pm 0.030$	$\pm 10\%$

PART NUMBER:

M304 TRD|DDDW|TTT  
OD | WALL

WHERE "DDD" = OUTSIDE DIAMETER IN INCHES  
AND "TTT" = WALL THICKNESS IN INCHES

EG. 0.375" OD X 0.065" WALL TUBING = M304 TRD 375W.065

**RELEASED**  
*8/23/14*

B		REFORMAT DWG ADD SPECS (ZN DR-1)		CP		08 10 20	
A		NEW ISSUE		DS		01 06 08	
REV	DESCRIPTION	BY	DATE	REV	DESCRIPTION	BY	DATE
	<b>DART AEROSPACE LTD</b>				<b>DART AEROSPACE LTD</b>		
	DRAWN				DRAWING NO		
	CHECKED				HAWKESBURY, ONTARIO, CANADA		
	MFG. APPR				M304TR		
	DE APPR				TITLE		
					304/316 ROUND TUBING		
					SCALE		
					NTS		
					REV. B		
					SHEET 1 OF 1		
					Copyright © 2000 BY DART AEROSPACE LTD		
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					IT MAY NOT BE COPIED OR DISCLOSED, IN WHOLE OR IN PART, WITHOUT THE		
					EXPLICIT WRITTEN PERMISSION OF DART AEROSPACE LTD.		

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M 304 TKO. 250W. 049  
 DATE: 18/6/17

PO / BATCH NO.: P0040406/5092700

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 140'  
 QUANTITY INSPECTED: 140'  
 QUANTITY REJECTED: 0'

THICKNESS ORDERED: 0.750"  
 THICKNESS RECEIVED: 0.750"  
 SHEET SIZE ORDERED: —  
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT FINISH	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORROSION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT GRAIN DIRECTION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	ASTM A269
CORRECT THICKNESS	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT REF # TO LINK CERT	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	HT:N170711AS10
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

*testers located in the Quality Office*

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>A1</u>	SIGNED OFF BY: _____
DATE: <u>18/6/17</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



**PLYMOUTH TUBE CO.**

USA

1209 East 12th Street, Streator, Illinois 61364

Phone: (815) 673-1515 Fax: (815) 672-7343

**TRUST YOUR SOURCE/ACCEPT NO SUBSTITUTIONS!**



## PRODUCT CERTIFICATION

SALES ORDER - LINE / RLS

162122 - 1 / 1

SHIP TO

TW Metals  
27 Englehard Drive  
Monroe Township, NJ 08831  
USA

WORK ORDER 022929  
HEAT NUMBER 24211  
MELT SOURCE Timken Steel - Melt/Mfg. USA

CUSTOMER P.O.	CUSTOMER PART	QUANTITY	LADING NO	CERT ID / REV	CERT DATE								
M 49386235	33047	3,249.5 ft	00101235	01	06/01/2018								
PART DESCRIPTION H07500490J000Z					TMW METALS								
OD: 0.7500" Max: 0.7550" Min: 0.7450" Wall: 0.0490" Max: 0.0540" Min: 0.0440" Length: 17.00' / 24.00' Spec: <u>MIL-T 6736B</u> Seamless Aircraft Grade: <u>4130</u> Finish: Cond N					JUN - 7 2018								
					ACCEPTED BY								
CERTIFICATION REQUIREMENTS													
FAR BAA (FAR 52.225-1 Buy America Act Supplies). DFARS 252.225-7001 By America Act & Bal. of Payments Program FAR TAA (FAR 52.225-5 Trade Agreements)(Paragraph 1,3,4,5) This material was Eddy Current tested and conforms to the requirements of ASTM A-450. The Grain size is determined and reported by the raw material supplier in accordance to ASTM E-112. This raw material was magnetic particle inspected by the raw material supplier in accordance to AMS 2640J and/or ASTM E-1444, and rated as Frequency, and Severity to AMS 2301, latest revision. Yield is determined by using the 0.2% offset method. This material meets Plymouth ProMoly specifications													
Chemical Analysis													
C .29	Mn .56	P .007	S .007	Si .30	Al .032	Cr 1.02	Mo .20	Ni .13	Pb 0	Cu .16	V 0	Ti 0	Sn .009
Physical Properties													
Freq. 0	Severity 0	Grain Size 8											
Mechanical Properties													
<u>TEST</u>	<u>UNITS</u>	<u>#TESTS</u>	<u>HIGH</u>	<u>LOW</u>	<u>AVERAGE</u>	<u>STD-DEV</u>							
Tensile	Psi	36	114580	108440	111752	1386							
Yield	Psi	36	107380	102030	104853	1234							
Elongation	%	36	19	18	18	1							
Rockwell C	Rc	36	21	21	21	0							
<u>TEST</u>	<u>RESULT</u>												
Decarb/OD	Pass												
Total ID/OD decarb	Pass												
Additional Specification(s)													
AMS-T6736 B, AMS 6360M													

I certify that the results are a true and correct copy of the records prepared and maintained by Plymouth Tube Company, Streator in compliance with the requirements of the cited specification. Chemistry is as reported by the Steel supplier. This test report cannot be reproduced or distributed except in full without the written permission of Plymouth Tube.

Jamie Derossett  
Quality Assurance

**PLYMOUTH TUBE CO.**

USA®

1209 East 12th Street, Streator, Illinois 61364

Phone: (815) 673-1515 Fax: (815) 672-7343

**TRUST YOUR SOURCE! ACCEPT NO SUBSTITUTIONS!****PRODUCT CERTIFICATION**

SALES ORDER - LINE / RLS

162122 - 1 / 1

**SHIP TO**

TW Metals  
27 Englehard Drive  
Monroe Township, NJ 08831  
USA

WORK ORDER 022929  
HEAT NUMBER 24211  
MELT SOURCE Timken Steel - Melt/Mfg. USA

CUSTOMER P.O.	CUSTOMER PART	QUANTITY	LADING NO	CERT ID / REV	CERT DATE
M 49386235	33047	3,249.5	ft 00101235	01	06/01/2018
PART DESCRIPTION	H07500490J000Z				

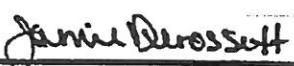
This test report data is for the heat Chemistry Stated above.

The material in this test report is:

- 1) Drawn in the USA
- 2) Free from Polybrominated Biphenyls (PBB),  
Polybrominated Diphenyl  
Ethers (PBDE), and Mercury contamination.
- 3) NAFTA compliant.

End of Certification

I certify that the results are a true and correct copy of the records prepared and maintained by Plymouth Tube Company, Streator in compliance with the requirements of the cited specification. Chemistry is as reported by the Steel supplier. This test report cannot be reproduced or distributed except in full without the written permission of Plymouth Tube.

  
Janice Derossett  
Quality Assurance

## SPECIFICATION CONTROL DRAWING

8	7	6	5	4	3	2	1	0
D								
C								
B								
A								

PURCHASE MATERIAL: AISI 4130N SEAMLESS STEEL TUBING

SPECIFICATION: MIL-T-673 OR AMS 6371, 6360, 6361, 6362, 6373, 6374

PART NUMBER: M4130N [D:DDD]W[TTT]

WHERE: "DDD" = OUTER DIAMETER (IN INCHES)  
AND "TTT" = WALL THICKNESS (IN INCHES)

DIA. | WALL

EG. 34" TUBING WITH .035" WALL = M4130N10750W035

RELEASED 2017-04-16 [Signature]

REV	DESCRIPTION	BY	DATE
B	REFORMAT DWG TO ACCOMODATE ADDITIONAL TUBE DIAMETERS AND WALL THICKNESS	RP	12-04-02
A	NEW ISSUE	JB	01-05-16

DESIGN	JB	DART AEROSPACE LTD	
DRAWN	RP	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AP	DRAWING NO.	REV B
MFG. APPR.		M4130N-T	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		STEEL TUBING	NTS
DATE	12-04-02	COPYRIGHT © 2001 BY DART AEROSPACE LTD	
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2 3 4 5 6 7 8

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M4130N70.750W.044  
 DATE: 18/07/17

PO / BATCH NO.: P0040406/3092701

MATERIAL CERT' REC'D: Yes  
 QUANTITY RECEIVED: 40'  
 QUANTITY INSPECTED: 40'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.750"  
 THICKNESS RECEIVED: 0.750"  
 SHEET SIZE ORDERED: —  
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
	Y	N	
SURFACE DAMAGE	<input checked="" type="radio"/>	<input type="radio"/>	
CORRECT FINISH	<input checked="" type="radio"/>	<input type="radio"/>	
CORROSION	<input checked="" type="radio"/>	<input type="radio"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/>	<input type="radio"/>	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/>	<input type="radio"/>	<u>M:1-T 6736</u>
CORRECT THICKNESS	<input checked="" type="radio"/>	<input type="radio"/>	
PHOTO REQUIRED	<input checked="" type="radio"/>	<input type="radio"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/>	<input type="radio"/>	<u>HT: 24211</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/>	<input type="radio"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/>	<input type="radio"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="radio"/>	<input type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="radio"/>	<input type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

*testers located in the Quality Office*

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>A1</u>	SIGNED OFF BY: _____
DATE: <u>18/07/17</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



PRECISION TUBE CO.

287 WISSAHICKON AVE.  
NORTH WALES PA 19454

Control No: 6257

## CERTIFIED TEST REPORT

CUSTOMER PURCHASE ORDER NO.		CUST. ORD. NO.	PRECISION TUBE P/N		
M 49380591 LINE 001		475790	24A031250580005		
<b>SOLD:</b> TW METALS <b>TO</b> 175 TUBEWAY FOREST PARK, GA 30298 UNITED STATES		<b>SHIP:</b> TW METALS <b>TO</b> 175 TUBEWAY FOREST PARK, GA 30298 UNITED STATES			
<b>QUANTITY ORD.</b>		<b>DESCRIPTION</b>		<b>QTY. SHIPPED</b>	
3204 FT		METAL - 6061 ALUM TEMPER - T6 SPEC - AMS 4082P ASTM-B-210-12 AMS-WW-T-700/6C LENGTH - 12 FT LGTH TOL +.1250 IN -.0000 IN SHAPE - ROUND FINISH - STRAIGHT EXACT LENGTHS OD .3125 +.0030 -.0030 ID WALL .0580 +.0040 -.0040		3456 FT	12/13/17
<b>MECHANICAL PROPERTIES</b>					
SAMPLE #	TENSILE STRENGTH (P.S.I.)	YIELD STRENGTH (P.S.I.)	ELONGATION IN 2 INCHES (%)	ROCKWELL HARDNESS	AVERAGE GRAIN SIZE (MM.)
1	46,376	41,941	12		
2	45,712	40,899	15		
<b>DESTRUCTIVE TESTS</b>					
Comments: FAR BAA COMPLIES, DFARS BAA COMPLIES, FAR TAA COMPLIES					
<b>NON-DESTRUCTIVE TESTS</b>					
EDDY CURRENT: PASS					
<b>CHEMICAL COMPOSITION</b>					
ALLOY: 6061	HEAT:	TRACEABILITY #: 2927553			
		RAW MATL VENDOR: PTC13607 - KAISER ALUMINUM INVESTMENTS			
Min	Si 0.40	Fe 0.15	Mn 0.80	Cr 0.04	
Max	0.80	0.70	0.40	1.20	0.35 0.25 0.15
OTHER ELEMENTS: 0.05 MAX EACH / 0.15 MAX TOTAL					Rem.

We hereby certify that the material has been manufactured and tested in accordance with the requirements of the applicable specifications and descriptions set forth on Precision Tube's sales acknowledgement. During the manufacturing, testing and inspection, the product did not come into direct contact with mercury or any of its compounds, nor with any mercury containing device employing a single boundary containment. Test results indicate that the material is compliant with the current revision of the RoHS Directive (2011/65/EU).

TEST REPORT  
ACCEPTED BY

DE 19 2017

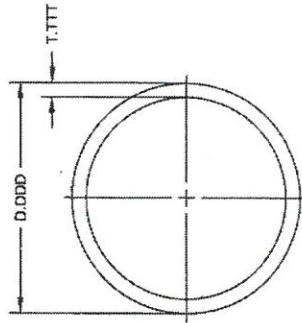
49380591

TW METALS

By: Jennifer JamesJennifer James  
Quality & Technical LeadMelted and Manufactured in USA  
QMS Registered to ISO 9001: 2008

12/13/17

Page: 1 of 1



PURCHASE MATERIAL 6061-T6/T62/T6510/T6511 SEAMLESS TUBING

SPECIFICATION:

WN-T-70066

OR QQ-A-2008 OR QQ-A-22558

OR AMS 4080 OR AMS 4082 OR AMS 4083

OR ASTM B210 OR ASTM B241

PART NUMBER:

M6061-T6T D.DDD WT.TTT

OD | WALL

WHERE "D.DDD" = OD IN INCHES

"T.TTT" = WALL THICKNESS

EG. 3/8" OD X 0.058 WALL = M6061-T6T0.375W0.058

PER ANSI H35.2

MATERIAL TOLERANCE:

△ C

RELEASED  
2013-07-02  
JW

DART AEROSPACE LTD			
HAWKESBURY, ONTARIO, CANADA			
C	COMPLETE REFORMAT, ADDED T6510 & T6511.	AJS	13.06.12
	ADDED AMS 4083, ASTM B210 & ASTM B241		
B	ADDED MATERIAL TOLERANCE	CP	04.01.23
	ADD QQ-A-2008 & QQ-A-22558		
A	NEW ISSUE	DS	01.06.21
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	△ C	REV. C	
MFG. APPR.	△ C	DRAWING NO.	
APPROVED	△ C	M6061-T6T	
DE APPR.	△ C	TITLE	SHEET 1 OF 1
		6061-T6 TUBING	SCALE
DATE	13.06.12	NTS	NTS
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WITHOUT THE EXPRESS WRITTEN PERMISSION OF DART AEROSPACE LTD.			

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M606176T0.3125W-058  
 DATE: 18/07/17

PO / BATCH NO.: P0040406/S092702

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 120  
 QUANTITY INSPECTED: 140  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.3125"  
 THICKNESS RECEIVED: 0.3125"  
 SHEET SIZE ORDERED: —  
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT FINISH	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORROSION	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT GRAIN DIRECTION	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="radio"/> N <input type="radio"/>	AMS 4082
CORRECT THICKNESS	Y <input checked="" type="radio"/> N <input type="radio"/>	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT REF # TO LINK CERT	Y <input checked="" type="radio"/> N <input type="radio"/>	417.2927553
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="radio"/> N <input type="radio"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/> N <input type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/> N <input type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/07/17</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

KAISER ALUMINUM  
 FABRICATED PRODUCTS, LLC  
 6573 W. WILLIS ROAD  
 CHANDLER, AZ 85226

CUSTOMER PO NUMBER:		CUSTOMER PART NUMBER:		PRODUCT DESCRIPTION:						
M49389319-1		41952		Drawn Seamless Tube/Pipe						
KAISER ORDER NUMBER:	LINE ITEM:	SHIP DATE:	KAISER LOT NUMBER:	ALLOY:	TEMPER:					
226113	001	05/29/2018	F00270254	6061	T6					
WEIGHT SHIPPED:	QUANTITY:	B/L NUMBER:	DIAM/DAF/THKNS:	WIDTH:	LENGTH:					
389.000 LB	479.000 PCS	229783			12.000 FT					
SHIP TO:		SOLD TO:								
TW METALS INC 235 WEST TUBEWAY DRIVE CAROL STREAM, IL 60188 USA		TW METALS INC 760 CONSTITUTION DRIVE SUITE 204 EXTON, PA 19341 USA								

### Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CON%IACS	BEND
F00270254	0001	0001	46.4	37.6	18.5	N/A	N/A	N/A

### Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
D21279	.58	.18	.22	.06	.97	.06	.02	.02	.00	.00	.00	.01	.02

### Applicable Requirements:

Description: OD: 0.3750"; Wall: 0.0580"; Round @  
 AMS4082P AMS-WW-T-700/6C ASTM B210-12  
 WE TAKE EXCEPTION TO PARA. 5.2.1., Per AMS4082P, WAS NOT OILED.  
 This Product Complies to FAR BAA, DFARS BAA, FAR TAA  
 COMPLIES TO DIN EN 10204 JAN 2005  
 No Weld Repair. Mercury Free.



### Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA.  
 MATERIAL COMPLIES WITH FAR BAA (FAR 52.225-1, BUY AMERICAN ACT- SUPPLIES), DFARS BAA  
 (DFARS 252.225-7001 BUY AMERICAN ACT & BAL OF PAYMENTS PROG), AND FAR TAA (FAR 52.225-5  
 TRADE AGREEMENTS).

Plant Serial: 00028471  
 Kaiser Order Number: 226113  
 Line Item: 001

**KAISER**  
**ALUMINUM**  
**FABRICATED PRODUCTS**

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
6573 W. WILLIS ROAD  
CHANDLER, AZ 85226

*Bent in  
Gusto*

**CERTIFIED TEST REPORT**  
<http://Online.KaiserAluminum.com>

**CERTIFICATION**

Kaiser Aluminum Fabricated Products, LLC ('Kaiser') hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms & conditions of sale. Test reports are on file subject to examination.

Hans Kattentidt, Quality Manager





Plant Serial: 00028471  
Kaiser Order Number: 226113  
Line Item: 001

	1	2	3	4	5	6	7	8
D								
C								
B								
A								

PURCHASE MATERIAL 6061-T6 / 6021T6 / T6510/T6511 SEAMLESS TUBING

SPECIFICATION: WW-T-700/6

OR QQ-A-200/8 OR QQ-A-225/8

OR AMS 4080 OR QMS 4082 OR AMS 4083

OR ASTM B210 OR ASTM B241

PART NUMBER: M6061T6TP<sub>1</sub>TD<sub>2</sub>D<sub>3</sub>WT<sub>4</sub>T<sub>5</sub>

WHERE "D<sub>1</sub>" = OD IN INCHES  
"T<sub>5</sub>" = WALL THICKNESS

EG. 3/8" OD X 0.058 WALL = M6061T6T0.375W0.058

MATERIAL TOLERANCE: PER ANSI H35.2

WHERE "D<sub>1</sub>" = OD IN INCHES  
"T<sub>5</sub>" = WALL THICKNESS

EG. 3/8" OD X 0.058 WALL = M6061T6T0.375W0.058

MATERIAL TOLERANCE: PER ANSI H35.2

RELEASER: **R** 2013-07-02 *[Signature]*

DART AEROSPACE LTD	
HAWKESBURY, ONTARIO, CANADA	
REV. C	SHEET 1 OF 1
DRAWN BY	SCALE
CHECKED BY	NTS
MFG. APPR. <i>[Signature]</i>	DRAWING NO. M6061T6T
APPROVED <i>[Signature]</i>	TITLE 6061-T6 TUBING
DE. APPR. <i>[Signature]</i>	DATE 13.06.12
AIS	AIS
REV. A	DATE

COMPLETE REFORMAT, ADDED T6510 & T6511.

ADDED AMS 4083, ASTM B210 & ASTM B241.

ADDED MATERIAL TOLERANCE.

ADD QQ-A-200/8 & QQ-A-225/8

NEW ISSUE

REVISIONS:

REV.	DESCRIPTION	BY	DATE
DESIGN	AIS	AIS	AIS
DRAWN	AIS	AIS	AIS
CHECKED	AIS	AIS	AIS
MFG. APPR.	AIS	AIS	AIS
APPROVED	AIS	AIS	AIS
DE. APPR.	AIS	AIS	AIS

NOTICE: This document contains neither recommendations nor statements of fact. It is the property of DART Aerospace Ltd. It is loaned to the recipient and is to be returned to DART Aerospace Ltd. when no longer needed. It is the property of DART Aerospace Ltd. and is loaned to the recipient. It is to be returned to DART Aerospace Ltd. when no longer needed. It is the property of DART Aerospace Ltd. and is loaned to the recipient. It is to be returned to DART Aerospace Ltd. when no longer needed.

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M60617610.375W.058  
 DATE: 18/07/17

PO / BATCH NO.: P0040406/5092703

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 120'  
 QUANTITY INSPECTED: 120'  
 QUANTITY REJECTED: 0'

THICKNESS ORDERED: 0.375"  
 THICKNESS RECEIVED: 0.38"  
 SHEET SIZE ORDERED: —  
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	N	
CORRECT FINISH	Y	N	
CORROSION	Y	N	
CORRECT GRAIN DIRECTION	Y	N	
CORRECT MATERIAL PER M-DRAWING	Y	N	AMS 4082
CORRECT THICKNESS	Y	N	
PHOTO REQUIRED	Y	N	
CORRECT REF # TO LINK CERT	Y	N	HT: F002702540001
CORRECT MATERIAL IDENTIFICATION	Y	N	
CORRECT M# ON THE MATERIAL	Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

*testers located in the Quality Office*

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/07/17</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
6573 W. WILLIS ROAD  
CHANDLER, AZ 85226

CUSTOMER PO NUMBER:		CUSTOMER PART NUMBER:		PRODUCT DESCRIPTION:			
M49388916-1		42807		Drawn Seamless Tube/Pipe			
KAISER ORDER NUMBER:	LINE ITEM:	SHIP DATE:	KAISER LOT NUMBER:	ALLOY:	TEMPER:		
226020	001	05/18/2018	F00269835	6061	T6		
WEIGHT SHIPPED:	QUANTITY:	B/L NUMBER:	DIAM/DAF/THKNS:	WIDTH:	LENGTH:		
332.000 LB	187.000 PCS	229660			12.000 FT		
SHIP TO:				SOLD TO:			
TW METALS INC 235 WEST TUBEWAY DRIVE CAROL STREAM, IL 60188 USA				TW METALS INC 760 CONSTITUTION DRIVE SUITE 204 EXTON, PA 19341 USA			

### Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CON%IACS	BEND
F00269835	0001	0001	45.9	39.2	20.5	N/A	N/A	N/A

### Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
D21416	.60	.28	.23	.05	.95	.10	.06	.03	.00	.00	.00	.01	.02

### Applicable Requirements:

Description: OD: 0.7500"; Wall: 0.0580"; Round @  
 AMS4082P AMS-WW-T-700/6C ASTM B210-12 WW-T-700/6F  
 WE TAKE EXCEPTION TO PARA. 5.2.1., Per AMS4082P, WAS NOT OILED.  
 This Product Complies to FAR BAA, DFARS BAA, FAR TAA  
 COMPLIES TO DIN EN 10204 JAN 2005  
 No Weld Repair. Mercury Free.



### Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA  
 MATERIAL COMPLIES WITH FAR BAA (FAR 52.225-1, BUY AMERICAN ACT- SUPPLIES), DFARS BAA  
 (DFARS 252.225-7001 BUY AMERICAN ACT & BAL OF PAYMENTS PROG), AND FAR TAA (FAR 52.225-5  
 TRADE AGREEMENTS).

# KAISER ALUMINUM FABRICATED PRODUCTS

*Brett in  
Chandler*

## CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
6573 W. WILLIS ROAD  
CHANDLER, AZ 85226

### CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC ('Kaiser') hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms & conditions of sale. Test reports are on file subject to examination.

Hans Kattentidt, Quality Manager

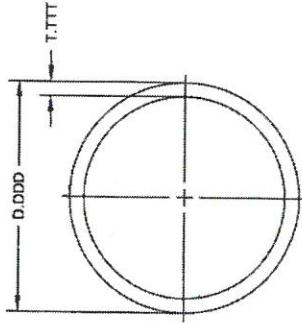


PURCHASE MATERIAL: M6061-T6/T62/T6510/T6511 SEAMLESS TUBING  
 SPECIFICATION: WW-1-7006  
 OR QQ-A-200/6 OR QQ-A-225/8  
 OR AMS 4080 OR AMS 4082 OR AMS 4083  
 OR ASTM B210 OR ASTM B241

PART NUMBER: M6061T6STD DDDWT TTT

MATERIAL TOLERANCE: OD [ ] WALL [ ]  
 WHERE "DDDD" = OD IN INCHES  
 "TTT" = WALL THICKNESS  
 EG. 3/8" OD X 0.058 WALL = M6061T6T0.375W0.058

PER ANSI H35.2



RELEASED  
2013-07-02  
JNP

REV.		DESCRIPTION	BY	DATE
C		COMPLETE REFORMAT ADDED T8510 & T8511. ADDED AMS 4083, ASTM B210 & ASTM B241	AJS	13.06.12
B		ADDED MATERIAL TOLERANCE ADD QQ-A-200/8 & QQ-A-225/8	CP	04.01.23
A		NEW ISSUE	DS	01.06.21

DESIGN	AJS	AJS	DART AEROSPACE LTD	
DRAWN			HAWKESBURY, ONTARIO, CANADA	REV. C
CHECKED			DRAWING NO.	SHEET 1 OF 1
MFG. APPR.			M6061T6T	SCALE
APPROVED			TITLE	NTS
DE APPR			6061-T6 TUBING	
DATE	13.06.12			

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6 061T6 TO. 750W.058  
 DATE: 18/07/17

PO / BATCH NO.: P0040406/5092704

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 481  
 QUANTITY INSPECTED: 481  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.250"  
 THICKNESS RECEIVED: 0.250"  
 SHEET SIZE ORDERED: —  
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
	Y	N	
SURFACE DAMAGE	<input checked="" type="radio"/>	<input type="radio"/>	
CORRECT FINISH	<input checked="" type="radio"/>	<input type="radio"/>	
CORROSION	<input checked="" type="radio"/>	<input type="radio"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/>	<input type="radio"/>	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/>	<input type="radio"/>	<u>AMS 4082</u>
CORRECT THICKNESS	<input checked="" type="radio"/>	<input type="radio"/>	
PHOTO REQUIRED	<input checked="" type="radio"/>	<input type="radio"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/>	<input type="radio"/>	<u>HT: F00264835 D001</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/>	<input type="radio"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/>	<input type="radio"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="radio"/>	<input type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="radio"/>	<input type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/07/17</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# Certified Inspection Report

ARCONIC FORGING AND EXTRUSIONS  
Lafayette Operations  
3131 East Main Street  
Lafayette, IN  
47905-7500



ARCONIC

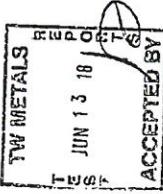
Arconic, Inc.

Invoice To Customer

TW METALS INC.  
-THE ARBORETUM SUITE 204  
760 CONSTITUTION DR  
EXTON, PA - 19341

Ship To Customer

TW METALS INC  
235 W. TUBEWAY  
CAROL STREAM, IL - 60188



Sales Order Number	Line No.	Customer P/O	Customer Part No.	Item Description
1000873303	16.1	49386800-001 / ITEM 45936		07-JUN-18

Quantity Shipped	Date Shipped	Item Description
494	07-JUN-18	Drawn Tube by Section SECT T-1095 (1.000 x 1.000 x 0.065) 144IN LN 6061776 Wf 0.269
B/L	Item No.	G03346527
2375146	Item No. Rev	
Delivery ID	Customer Part No	
11764972		

Notes

THE MATERIAL FOR THIS ORDER WAS MELTED AND MANUFACTURED IN USA.

OCR - .156

COMPOSITION NOTE: The values for 'Others Each' and 'Others Total' have met the limits as shown on this certified inspection report. Remainder is Aluminum.  
CAST/JOB NUMBER : 1806-M71/25391932

## Legal Statement

We hereby certify that, unless otherwise indicated, the material covered by this report has been manufactured, inspected, and tested in accordance with, and has been found to meet, the applicable requirements described herein, including any specifications forming a part of the description and that samples representative of the material met the composition and had the mechanical properties shown on the face of this certification. Also, note that mercury is not a normal contaminant in aluminum alloys and neither it nor any of its compounds are used in the manufacture of our product. This certification is not to be reproduced in partial form without prior written approval of our Quality Assurance Dept.

## Signature And Title

Melissa Griffith  
Quality Control Manager

## Quantities per Lot / Packages

Package Number	Lot Number	Quantity	UOM	Weight	
				Gross	Net
G17-PKG897050	25591932	76	PCS	265	245
G17-PKG897052	25591932	77	PCS	269	249

## Composition Limits

Alloy	Wt %	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
6061	Min	0.40	...	0.15	...	0.8	0.04	...	...
6061	Max	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15

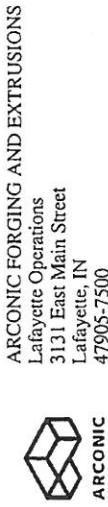
## Others Total

Alloy	Wt %	Others Each	Others Total
6061	Min	...	...
6061	Max	0.05	0.15

## Composition Results

Heat / Cast / Lot Number	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
1806-M71	0.6	0.27	0.28	0.03	0.9	0.06	0.01	0.02

# Certified Inspection Report



## Composition Results

Heat / Cast / Lot Number		Others Each	Others Total	
1806-M71	--		--	
			--	

## Mechanical Property - Test Results

Test Type		UTS - L	TYS - L	
UOM		KSI	KSI	PCT
# of Tests				
Test Temper	Lot Number	Piece / Test ID	Results	Results
T6	25391932	1-F	46.7	42.9

## Other - Test Limits

Test Type		Dimensional	
UOM		UOM	
# of Tests			
Test Temper	Lot Number	Min	Max
T6	SPEC LIMITS	P	--

## Other - Test Results

Test Type		Dimensional	
UOM		UOM	
# of Tests			
Test Temper	Lot Number	Results	Results
T6	25391932	P	P

## Cert Notes

Made in USA  
The test report shall not be reproduced except in full, without the written approval of the Quality Department. No alteration, addition or other change is authorized to be made to this certificate. The recording of false, fictitious, or otherwise fraudulent statements or entries on this certificate by any recipient may be punished as a felony under applicable law.





DESIGN <i>CP</i>	DRAWN BY <i>MM</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED <i>CP</i>	APPROVED <i>MM</i>	DRAWING NO. M6061T6TS
DATE 01.09.24		TITLE 6061-T6 SQUARE TUBING
A	01.09.24	SCALE MTS NEW ISSUE

PURCHASE MATERIAL:

*6061-T6 (OR 6061-T6S1/T6S10/T6S11/T62) SQUARE TUBING  
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR  
PER AMS-QQ-A-200/8 (OR AMS 4160)*

PART NUMBER:

M6061T6TS | A.AAA | W | TTT | WHERE A.AAA = WIDTH IN INCHES  
| WIDTH | WALL | . TTT = WALL THICKNESS IN INCHES

EG. 0.75" x 0.75" x 0.062" W/W = M6061T6TS 0.750W.062

RELEASED  
01.09.25

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## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M606176TS1.000W,065  
 DATE: 18/07/11

PO / BATCH NO.: P0040406/5092705

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 36'  
 QUANTITY INSPECTED: 36'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.000"  
 THICKNESS RECEIVED: 1.000"  
 SHEET SIZE ORDERED: —  
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	N	
CORRECT FINISH	Y	N	
CORROSION	Y	N	
CORRECT GRAIN DIRECTION	Y	N	
CORRECT MATERIAL PER M-DRAWING	Y	N	ASTM B210
CORRECT THICKNESS	Y	N	
PHOTO REQUIRED	Y	N	
CORRECT REF # TO LINK CERT	Y	N	H7:25391932
CORRECT MATERIAL IDENTIFICATION	Y	N	
CORRECT M# ON THE MATERIAL	Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/07/11</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



KAISER ALUMINUM  
 FABRICATED PRODUCTS, LLC  
 6573 W. WILLIS ROAD  
 CHANDLER, AZ 85226

CUSTOMER PO NUMBER:		CUSTOMER PART NUMBER:		PRODUCT DESCRIPTION:							
M49383924-1		43160		Drawn Seamless Tube/Pipe							
KAISER ORDER NUMBER:	LINE ITEM:	SHIP DATE:		KAISER LOT NUMBER:	ALLOY:	TEMPER:					
225274	001	03/05/2018		F00263075	6061	T6					
WEIGHT SHIPPED:	QUANTITY:	B/L NUMBER:		DIAM/DAF/THKNS:	WIDTH:	LENGTH:					
422.000 LB	283.000 PCS	228744				12.000 FT					
SHIP TO:				SOLD TO:							
TW METALS INC 27 ENGLEHARD DRIVE EXIT 8A OFF NJ TPK MONROE TWP, NJ 08831 USA				TW METALS INC 760 CONSTITUTION DRIVE SUITE 204 EXTON, PA 19341 USA							

### Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CON%IACS	BEND
F00263075	0001	0001	47.8	41.2	20.0	N/A	N/A	N/A
F00263075	0001	0002	48.2	42.5	20.5	N/A	N/A	N/A
F00263075	0002	0001	48.5	42.3	21.5	N/A	N/A	N/A

### Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
D30855	.61	.22	.23	.02	.96	.06	.02	.02	.00	.00	.00	.01	.02

### Applicable Requirements:

Description: OD: 1.0000"; Wall: 0.0350"; Round @  
 AMS4082P AMS-WW-T-700/6C ASTM B210-12 WW-T-700/6F  
 WE TAKE EXCEPTION TO PARA. 5.2.1., Per AMS4082P, WAS NOT OILED.  
 This Product Complies to FAR BAA, DFARS BAA, FAR TAA  
 COMPLIES TO DIN EN 10204 JAN 2005  
 No Weld Repair. Mercury Free.



### Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA  
 MATERIAL COMPLIES WITH FAR BAA (FAR 52.225-1, BUY AMERICAN ACT- SUPPLIES), DFARS BAA  
 (DFARS 252.225-7001 BUY AMERICAN ACT & BAL OF PAYMENTS PROG), AND FAR TAA (FAR 52.225-5  
 TRADE AGREEMENTS).

Plant Serial: 00027597

Kaiser Order Number: 225274

Line Item: 001

# KAISER ALUMINUM FABRICATED PRODUCTS



## CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
6573 W. WILLIS ROAD  
CHANDLER, AZ 85226

### CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC ('Kaiser') hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms & conditions of sale. Test reports are on file subject to examination.

Hans Kattentidt, Quality Manager



	1		2		3		4		5		6		7		8	
	D		C		B		A									

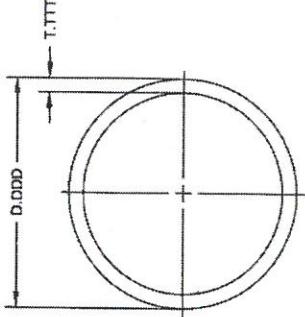
PURCHASE MATERIAL 6061-T6/T62/T6510/T6511 SEAMLESS TUBING  
 SPECIFICATION:  
 WW-T-700/6  
 OR QQ-A-200/6 OR QQ-A-226/8  
 OR AMS 4080 OR AMS 4082 OR AMS 4083  
 OR ASTM B210 OR ASTM B241

△ C

PART NUMBER:  
 M6061T6TP.DDD|WT:TTT  
 OD | WALL  
 △ C

MATERIAL TOLERANCE:  
 PER ANSI H35.2  
 △ C

WHERE "DDD" = OD IN INCHES  
 "TTT" = WALL THICKNESS  
 EG. 3/8" OD X 0.058 WALL = M6061T6T0.375W0.058



RELEASED  
 R 2013-07-02  
 △ C

REV.		DESCRIPTION		BY DATE
DESIGN	A.I.S.	A.I.S.	A.I.S.	DATE
DRAWN				13.06.12
CHECKED				
MFG. APPR.				
APPROVED				
DE APPR.				
DATE				

DART AEROSPACE LTD  
 HAWKSBURY, ONTARIO, CANADA

REV. C  
 SHEET 1 OF 1  
 SCALE  
 NTS

DRAWING NO.  
 M6061T6T  
 TITLE  
 6061-T6 TUBING

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# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6 T1.00W.035  
 DATE: 18/07/17

PO / BATCH NO.: P0040406/5092706

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 121  
 QUANTITY INSPECTED: 121  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1"  
 THICKNESS RECEIVED: 1"  
 SHEET SIZE ORDERED: —  
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
	Y	N	
SURFACE DAMAGE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>AMS 4082</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
PHOTO REQUIRED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>HT: F00263025 0001</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/07/17</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
6573 W. WILLIS ROAD  
CHANDLER, AZ 85226

CUSTOMER PO NUMBER:		CUSTOMER PART NUMBER:		PRODUCT DESCRIPTION:							
M49387366-1		42891		Drawn Seamless Tube/Pipe							
KAISER ORDER NUMBER:	LINE ITEM:	SHIP DATE:		KAISER LOT NUMBER:	ALLOY:	TEMPER:					
225794	001	04/25/2018		F00267223	6061	T6					
WEIGHT SHIPPED:	QUANTITY:	B/L NUMBER:		DIAM/DAF/THKNS:	WIDTH:	LENGTH:					
3127.000 LB	901.000 PCS	229377				12.000 FT					
SHIP TO:				SOLD TO:							
TW METALS INC 235 WEST TUBEWAY DRIVE CAROL STREAM, IL 60188 USA				TW METALS INC 760 CONSTITUTION DRIVE SUITE 204 EXTON, PA 19341 USA							

### Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CON%IACS	BEND
F00267223	0001	0001	48.9	42.2	22.0	N/A	N/A	N/A
F00267223	0002	0001	47.2	41.0	21.5	N/A	N/A	N/A
F00267223	0003	0001	47.1	40.9	21.5	N/A	N/A	N/A
F00267223	0004	0001	48.1	40.8	22.0	N/A	N/A	N/A
F00267223	0005	0001	47.9	41.1	20.0	N/A	N/A	N/A

### Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
D20789	.59	.25	.22	.05	.99	.05	.05	.02	.00	.00	.00	.01	.02

### Applicable Requirements:

Description: OD: 0.7500"; Wall: 0.1250"; Round @  
 AMS4082P AMS-WW-T-700/6C ASTM B210-12 WW-T-700/6F  
 WE TAKE EXCEPTION TO PARA. 5.2.1., Per AMS4082P, WAS NOT OILED.  
 This Product Complies to FAR BAA, DFARS BAA, FAR TAA  
 COMPLIES TO DIN EN 10204 JAN 2005  
 No Weld Repair. Mercury Free.



### Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA  
 MATERIAL COMPLIES WITH FAR BAA (FAR 52.225-1, BUY AMERICAN ACT- SUPPLIES), DFARS BAA  
 (DFARS 252.225-7001 BUY AMERICAN ACT & BAL OF PAYMENTS PROG), AND FAR TAA (FAR 52.225-5  
 TRADE AGREEMENTS).

# KAISER ALUMINUM FABRICATED PRODUCTS



## CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
6573 W. WILLIS ROAD  
CHANDLER, AZ 85226

### CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC ('Kaiser') hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms & conditions of sale. Test reports are on file subject to examination.

Hans Kattentmidt, Quality Manager

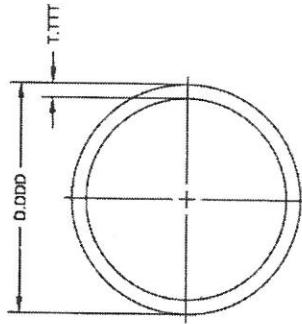


PURCHASE MATERIAL: 6061-T6/T62/T6511 SEAMLESS TUBING  
 SPECIFICATION:  
 WWW-T-700/6  
 OR QQ-A-200/8 OR QQ-A-225/8  
 OR AMS 4080 OR AMS 4082 OR AMS 4083  
 OR ASTM B210 OR ASTM B241

PART NUMBER:  
 M6061T6TID<sub>1</sub>DDDW<sub>2</sub>T<sub>3</sub>T<sub>4</sub>  
 OD | WALL

MATERIAL TOLERANCE:  
 PER ANSI H35.2

WHERE "DDDW" = OD IN INCHES  
 "T<sub>3</sub>T<sub>4</sub>" = WALL THICKNESS  
 EG. 3/8" OD X 0.058 WALL = M6061T6T0.375W0.058



RELEASED  
 2013-07-02  
 JNP

COMPLETE REFORMAT ADDED T6510 & T6511.		AJS	13.06.12
C	ADDED AMS 4083, ASTM B210 & ASTM B241		
B	ADDED MATERIAL TOLERANCE	CP	04.01.23
A	NEW ISSUE	DS	01.06.21
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AJS	DRAWING NO.	REV. C
MFG. APPR.	AJS	M6061T6T	SHEET 1 OF 1
APPROVED	AJS	TITLE	SCALE
DE APPR.	AJS	6061-T6 TUBING	NTS
DATE	13.06.12	COPYRIGHT © 2001 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS NOT TO BE USED ON THE EXTERIOR. DRAFTING STICKS THAT ARE WRITTEN ON THE EXTERIOR ARE TO BE REMOVED AND DESTROYED.			

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M60617670-750W.125  
 DATE: 18/6/17

PO / BATCH NO.: P0040406/5092707

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 121  
 QUANTITY INSPECTED: 111  
 QUANTITY REJECTED: 8

THICKNESS ORDERED: 0.750"  
 THICKNESS RECEIVED: 0.750"  
 SHEET SIZE ORDERED: —  
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <u>N</u>	
CORRECT FINISH	Y <u>N</u>	
CORROSION	Y <u>N</u>	
CORRECT GRAIN DIRECTION	Y <u>N</u>	
CORRECT MATERIAL PER M-DRAWING	Y <u>N</u>	AMS4082
CORRECT THICKNESS	Y <u>N</u>	
PHOTO REQUIRED	Y <u>N</u>	
CORRECT REF # TO LINK CERT	Y <u>N</u>	HT: F00267223 0002
CORRECT MATERIAL IDENTIFICATION	Y <u>N</u>	
CORRECT M# ON THE MATERIAL	Y <u>N</u>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <u>N</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <u>N</u>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

*testers located in the Quality Office*

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/6/17</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
6573 W. WILLIS ROAD  
CHANDLER, AZ 85226

CUSTOMER PO NUMBER:		CUSTOMER PART NUMBER:		PRODUCT DESCRIPTION:							
M49386278-1		42558-144		Drawn Seamless Tube/Pipe							
KAISER ORDER NUMBER:	LINE ITEM:	SHIP DATE:		KAISER LOT NUMBER:	ALLOY:	TEMPER:					
225635	001	04/20/2018		F00266049	6061	T6					
WEIGHT SHIPPED:	QUANTITY:	B/L NUMBER:		DIAM/DAF/THKNS:	WIDTH:	LENGTH:					
256.000 LB	159.000 PCS	229334				12.000 FT					
SHIP TO:				SOLD TO:							
TW METALS INC 27 ENGLEHARD DRIVE EXIT 8A OFF NJ TPK MONROE TWP, NJ 08831 USA				TW METALS INC 760 CONSTITUTION DRIVE SUITE 204 EXTON, PA 19341 USA							

### Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CON%IACS	BEND
F00266049	0001	0001	47.9	40.3	21.0	N/A	N/A	N/A

### Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
D21417	.60	.27	.23	.05	1.01	.10	.06	.03	.00	.00	.00	.01	.02

### Applicable Requirements:

Description: OD: 0.6250"; Wall: 0.0650"; Round @  
AMS4082P AMS-WW-T-700/6C ASTM B210-12 WW-T-700/6F  
WE TAKE EXCEPTION TO PARA. 5.2.1., Per AMS4082P, WAS NOT OILED.  
This Product Complies to FAR BAA, DFARS BAA, FAR TAA  
COMPLIES TO DIN EN 10204 JAN 2005  
No Weld Repair. Mercury Free.



### Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA  
MATERIAL COMPLIES WITH FAR BAA (FAR 52.225-1, BUY AMERICAN ACT- SUPPLIES), DFARS BAA  
(DFARS 252.225-7001 BUY AMERICAN ACT & BAL OF PAYMENTS PROG), AND FAR TAA (FAR 52.225-5  
TRADE AGREEMENTS).

Plant Serial: 00028036

Kaiser Order Number: 225635

Line Item: 001

# KAISER ALUMINUM FABRICATED PRODUCTS



## CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
6573 W. WILLIS ROAD  
CHANDLER, AZ 85226

### CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC ('Kaiser') hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms & conditions of sale. Test reports are on file subject to examination.

Hans Kattentmidt, Quality Manager



PURCHASE MATERIAL 6061-T6/762/T651/0/T6511 SEAMLESS TUBING  
SPECIFICATION: 6061-T6/762/T651/0/T6511  
C

OR QQ-A-2008 OR QQ-A-225/8  
OR AMS 4080 OR AMS 4080C OR AMS 4083  
OR ASTM B210 OR ASTM B241

PARTNERS

WHERE "DDD" = OD IN INCHES  
 "T...TTT" = WALL THICKNESS  
 EG. 348° OD X 0.058 WALL = M6011T0.375W0.058

A technical drawing of a circular part. The outer diameter is labeled as 0.0000. The inner diameter of a concentric hole is labeled as 7.777. The drawing includes a horizontal centerline and a vertical centerline intersecting at the center of the circles.

RELEASED  
2013-07-02  
1

COMPLETE REFORMAT, ADDED T8510 & T8511.		AJS		13.08.12	
ADDED AMS 4083, ASTM B210 & ASTM B241		CP		04.01.23	
ADDED MATERIAL TOLERANCE		DS		01.08.21	
ADD QCI-A-2008B & QC-A-22518		BY		DATE	
A NEW ISSUE					
REV.	DESCRIPTION	DESIGN	AJS	REV. C	NTS
	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	DRAWN	AJS	DRAWING NO.	
		CHECKED	<i>[Signature]</i>	M8061-1T61	
		MFG. APPR.	<i>[Signature]</i>	TITLE	
		DE APPR.	<i>[Signature]</i>	6061-16 TUBING	
		DATE	13.06.12	COPYRIGHT © 2001 BY DART AEROSPACE LTD. ALL RIGHTS RESERVED. NO PART OF THIS DRAWING MAY BE COPIED, REPRODUCED, OR REDUCED TO A SMALLER SIZE, NOR MAY IT BE TRANSFERRED TO ANOTHER DRAWING SHEET, OR USED AS A BASE FOR ANOTHER DRAWING, WITHOUT THE WRITTEN CONSENT OF DART AEROSPACE LTD.	

<b>DART AEROSPACE LTD</b>	
HAWKESBURY, ONTARIO, CANADA	
DESIGN	AJS
DRAWN	AJS
CHECKED	<i>h</i>
MFG. APPR.	<i>h</i>
APPROVED	<i>h</i>
DE APPR	<i>h</i>
DATE	13.06.12
REV. C	
SHEET 1 OF 1	
SCALE	
NTS	
COPRIGHT (C) 2001 BY DART AEROSPACE LTD	
THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE LTD. IT IS TO BE KEPT SECURE AND IS NOT TO BE COPIED OR DISSEMINATED WITHOUT THE EXPRESS WRITTEN CONSENT OF DART AEROSPACE LTD. IT IS THE PROPERTY OF DART AEROSPACE LTD. IT IS TO BE KEPT SECURE AND IS NOT TO BE COPIED OR DISSEMINATED WITHOUT THE EXPRESS WRITTEN CONSENT OF DART AEROSPACE LTD.	

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T670.625W.065  
 DATE: 18/07/17

PO / BATCH NO.: P0040406/5042708

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 24'  
 QUANTITY INSPECTED: 24'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.625"  
 THICKNESS RECEIVED: 0.625"  
 SHEET SIZE ORDERED: —  
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/>	
CORRECT FINISH	Y <input checked="" type="radio"/>	N
CORROSION	Y <input checked="" type="radio"/>	
CORRECT GRAIN DIRECTION	Y <input checked="" type="radio"/>	N
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="radio"/>	AMS 4082
CORRECT THICKNESS	Y <input checked="" type="radio"/>	N
PHOTO REQUIRED	Y <input checked="" type="radio"/>	
CORRECT REF # TO LINK CERT	Y <input checked="" type="radio"/>	N <i>PT-F00266049 001</i>
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="radio"/>	N
CORRECT M# ON THE MATERIAL	Y <input checked="" type="radio"/>	N
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/>	N

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

*testers located in the Quality Office*

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>A1</u>	SIGNED OFF BY: _____
DATE: <u>18/07/17</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in